

Space Policy Institute

THE GEORGE WASHINGTON UNIVERSITY

Fall 2022 Newsletter

Fall Events

The Space Policy Institute held a robust schedule of events in the second half of 2022. SPI partnered with Aerospace's Center for Space Policy & Strategy in August to present "After the KE-ASAT Moratorium: What Next?" The event examined the U.S.'s whole of government approach in establishing and reinforcing space norms of behavior, the role the private sector can play, and challenges entailed.

Opening remarks were offered by Chirag Parikh, Deputy Assistant to the President and Executive Secretary of the National Space Council. The government panel was moderated by SPI Director Scott Pace, and included Tom Colvin of NASA, Richard DalBello of the Office of Space Commerce, Eric Desautels of the U.S. Department of State, and Travis Langster of the U.S. Department of Defense. The commercial panel was moderated by Jamie Morin of Aerospace's Center for Space Policy and Strategy, and included Joe Anderson of Space Logistics, Amber Charlesworth of Amazon Project Kuiper, Robin Dickey of the Aerospace Corporation, Dan Oltrogge of COMSPOC, and Charity Weeden of Astroscale.



In September SPI was well-represented at the 2022 International Astronautical Congress in Paris, France with SPI faculty, students, visiting scholars, and alumni.



In November SPI hosted "Pushing the Frontiers of Science with Black Holes" with Dr. Feryal Ozel, founding member of the Event Horizon Telescope collaboration, and Chair and Professor in the School of Physics at Georgia Tech. She detailed their breakthrough work in capturing the first imagery of black holes, the challenges faced, and their continuing efforts on the vanguard of space exploration.



SPI also hosted the North American book debut of "Original Sin: Power, Technology and War in Outer Space", with author Dr. Bleddyn Bowen, former SPI Visiting Scholar. Drawing upon his expertise in space policy and international relations in outer space, his book examines the roots of the advancement of space technologies, and argues that civil space efforts have drawn public attention away from a preeminent goal of military and economic control of space as a source of power on Earth.

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European Space Agency Director General Dr. Joseph Aschbacher also visited SPI in November, and presented “ESA Agenda 2025”, which underpinned the program proposal recently submitted to the ESA Council at the Ministerial Level meetings. He outlined the challenges ahead for maintaining and growing Europe’s role in the space economy, the high ambitions he’s set for ESA, and discussed the outcomes of the Ministerial Level meetings.



In December SPI and Planet hosted a reception in honor of the U.S.-Africa Space Forum and the U.S.-Africa Leaders Summit. The event provided an opportunity to discuss how the United States and African nations can collaborate in the space sector to drive change throughout the continent. The reception featured opening remarks by Chirag Parikh, and provided opportunities for meaningful connection among attendees.

Faculty and Staff News



SPI Director, Dr. Scott Pace, was awarded the Order of the Rising Sun and Silver Stars by the Japanese government in July 2022. Established in 1875, the honor goes to individuals who have accomplished distinguished achievements in their field. The ceremony was hosted by the Japanese Ambassador to the United States and took place at the Ambassador’s residence.

In August he was elected as an American Astronautical Society Fellow in recognition of outstanding contributions to astronautics, the space industry, and AAS.

In October Dr. Pace gave the prestigious Minta Martin Lecture at the Massachusetts Institute of Technology’s Department of Aeronautics & Astronautics. His lecture “U.S. Space Policy, National Security & Global Futures” focused on U.S. national space policy and the work of the National Space Council during his tenure as Executive Secretary.

In December Dr. Pace was published in the *Journal of Space Safety Engineering*. His article, “Alternative Futures for Crewed Space Cooperation After the International Space Station”, considers the centrality of the International Space Station (ISS) in international human spaceflight cooperation, its diminishing technical viability, and prospective futures for crewed operations. This paper was based on his presentation at the IAC meeting in Paris, which highlighted the potential role of India in future space cooperation.

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In addition to moderating the “After the KE-ASAT Moratorium: What Next?” panel, Dr. Pace also moderated panels for the Ascend 2022 conference in Las Vegas, NV and the U.S. Chamber of Commerce’s Global Aerospace Summit in Washington, D.C.

Dr. Pace made numerous media appearances in the Fall of '22, including CNN, Politico, Vox, El Mercurio, the Space Café Radio podcast, and GW Today, among others.

Research Professor Henry R. Hertzfeld was once again faculty advisor to GW’s Space Law moot court team this past fall. Following their winning the North American competition last March, the team advanced to the World finals at the IAC in Paris, France where they argued in front of judges from the International Court of Justice. Although Leiden University won the competition, GW Law and Elliott School student Evan Matsuda was selected as Best Oral Advocate in the competition.

Over the summer Dr. Hertzfeld gave a presentation at a space symposium held at Bocconi University in Milan, and lectured on both law and economics at the ISU SSP in Portugal. At the IAC in September, he delivered a keynote address at the Space Security session and chaired two other sessions. In October he was on a virtual space law panel at Columbia University in New York, and in November lectured virtually on space resource rights at ISU in Strasbourg. Dr. Hertzfeld was quoted in TIME magazine in November as well as other publications during the latter half of 2022.

Professor Emeritus John M. Logsdon continues to be active at SPI and in the space community. Among his many appearances in electronic and print media this past fall were the Associated Press, and he continues to serve on the Board of Directors of The Planetary Society.

Research Professor Pascale Ehrenfreund was elected as President of the Committee on Space Research (COSPAR) at its 44th Scientific Assembly in Athens, Greece. She also received the COSPAR Harrie Massey Award for outstanding

contributions to the development of space research in which leadership is of particular importance.

Dr. Ehrenfreund concluded her term as President of the International Astronautical Federation, where she focused on supporting global space governance, promoting the global space economy, advancing global space interests, and focusing on common goals and endeavors.

She continues her work as President of the International Space University, and joined the Board of Directors of the Space Foundation. Dr. Ehrenfreund also coauthored “Biosignature Stability in Space Enables Their Use for Life Detection on Mars”, which was published in *Science Advances*.

Assistant Professor Aaron Bateman had a busy fall with multiple speaking engagements. Presentation topics included transatlantic space cooperation at the Norwegian Space Agency, the role of space in NATO defense strategy at the Norwegian Defense University, the role of space in Anglo-American relations with University College London, and events with the University of Oslo, IFSH Hamburg, and the RAND Corporation discussing satellite technology and arms control monitoring.

His article “Keeping the Technological Edge: The Space Arms Race and Anglo-American Relations in the 1980s” was published in *Diplomacy & Statecraft*, and “Trust but Verify: Satellite Reconnaissance, Secrecy and Arms Control During the Cold War” was published in the *Journal of Strategic Studies*. Dr. Bateman also made multiple media appearances in The Economist, Lawfare’s Chatter podcast, Gizmodo, and the Associated Press, among others.

Adjunct Professor Peter Hays served as reviewer, commenter, and was extensively cited in Bleddyn E. Bowen’s “Original Sin: Power, Technology and War in Outer Space”, Teona Patussi’s “Space Warfare and the Weaponization of Outer Space”, Tale Sundlisæter’s “Space Power in the High North: Perspectives from the Kingdom of Norway”, Steven P. Bourdow II’s “Multilateral Deterrence Formation

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and Future US Security Challenges”, and Jaganath Sankaran’s “Russia’s Anti-Satellite Weapons: A Hedging and Offsetting Strategy to Deter Western Aerospace Forces.”

Dr. Hays also gave multiple presentations, including “Space Policy to the Saudi Space Commission course Space Policy, History, and Commercialization”, “The Potential of Space-Based Missile Defense” at the USAF Academy’s National Security Strategic Studies Partnership Workshop, “The U.S. Pursuit of Strategic Advantage in Space” at the Lawrence Livermore National Laboratory’s Center for Global Security Research, and “Options for Strengthening Cross Domain Deterrence” at the Prague Security Studies Institute’s Space Security Conference.

Adjunct Professor John “Patsy” Klein supported planning events for national security space wargames, including the U.S. Space Force’s Schreiber Wargame, a multinational event that first began in 2001. The wargame involves multiple military and civilian agencies, and is designed to analyze critical space issues, identify solutions to common challenges, and advance space support doctrines.

In September Dr. Klein spoke on “Outcompeting China in Space” at the U.S. Air Force Academy’s National Security Strategic Studies Partnership event. In December, he spoke on “Securing Space: Preparing for Future Space Contingencies” at the Atlantic Council’s Forward Defense Forum. Dr. Klein also completed the manuscript for his third book, “Fight for the Final Frontier: Irregular Warfare and Competition in the Space Domain”, which will be published fall of 2023.

Student News

We are very proud of our space policy student Dr. Yaofu Zhou, who graduated this past December with his M.A. in International Science and Technology Policy. We wish him the best of luck in his future endeavors!

SPI Students worked and interned at multiple civil, national security, commercial, and nonprofit organizations during the fall 2022 semester, including NASA, the Federal Aviation Administration, the State Department, Department of Defense, the Intelligence Community, the Aerospace Corporation, BryceTech, Amazon Web Services, SpinLaunch, Intelsat, the Atlantic Council, the Space Foundation, and more.

Seven SPI students received fellowship awards thanks to SPI’s generous supporters. Many SPI students authored papers or received recognitions as well. Elizabeth Anderson was published in *The Space Report* as her first independent writing credit. Her article, “Nation in Review: Bahrain”, examined Bahrain’s ambitious space policy strategy in the context of Middle Eastern competition and regional partnerships. Joshua Ingersoll was selected for *Aviation Week & Space Technology’s* “20 Twenties: The New Faces of Aerospace and Defense.” PhD student Drew Garza was featured in *GW Today*, where he discussed his military service, the scholarships that made his education possible, and the opportunities he’s found through SPI.



In November SPI students toured the Eisenhower Executive Office Building and met with Chirag Parikh, Executive Secretary of the National Space Council. Students extend their appreciation to Dr. Bateman for arranging the tour!

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Message From the Director



Professor Scott Pace

2022 marked the Space Policy Institute's 35th year of education, research, outreach, and most importantly, contribution to the development of students, scholars, and professionals.

Whether preparing future leaders for the realities of working in the space sector, providing a collaborative environment for scholars to pursue new ideas, or equipping today's professionals with the knowledge to tackle current issues, we are committed to developing minds to undertake those challenges. As we reflect on our past and look to the future, we are grateful to the space community for the opportunity to be a part of this great adventure.

We continue to benefit from a steady stream of dedicated students interested in science and technology policy and space policy in particular. Administrative work increased in the fall as my colleague, Prof. Nick Vonortas, was tapped to be Associate Dean for Faculty and Research. This results in my being "triple hatted" as the director of the Space Policy Institute, the director of the International Institute for Science and Technology Policy, and the director for the master's program in International Science and Technology Policy. Thus, I've had an opportunity to learn about several new subjects such as data governance, artificial intelligence, and energy policy in support of faculty colleagues and students outside the space field.

I retain a strong interest in Japanese space policy, which has taken on increased importance for space security and as part of the Artemis program. I continue to track work at the UN Committee on the Peaceful Users of Outer Space for the long-term sustainability of space activities. And finally, I've have been working with Internet and space communications experts from several countries on the architecture and governance of a Solar System-wide internet. We're looking forward to an exciting and busy spring 2023 and hope to see you at SPI events or in the Washington, DC area.

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